

KANTOR, S.M.

PHASE I BOOK EXPLOITATION SGV/5592

Vsesoyuznoye soveshchaniye po vnedreniyu radioaktivnykh izotopov i yadernykh izlucheniyy v narodnom khozyaystve SSSR. Riga, 1960.

Radioaktivnyye izotopy i yadernyye izlucheniya v narodnom khozyaystve SSSR; trudy Vsesoyuznogo soveshchaniya 12 - 16 aprelya 1960 g. g. Riga, v 4 tomakh. t. 4: Poiski, razvedka i razrabotka poleznykh iskopayemykh (Radioactive Isotopes and Nuclear Radiation in the National Economy of the USSR; Transactions on the Symposium Held in Riga, April 12 - 16, 1960, in 4 volumes. v. 4: Prospecting, Surveying, and Mining of Mineral Deposits) Moscow, Gostoptekhizdat, 1961. 284 p. 3,640 copies printed.

Sponsoring Agency: Gosudarstvennyy nauchno-tekhnicheskyy komitet Soveta Ministrov SSSR. Gosudarstvennyy komitet Soveta Ministrov SSSR po ispol'zovaniyu atomnoy energii

Eds. (Title page): N. A. Petrov, L. I. Petrenko, and P. S. Savitskiy; ed. of this volume: M. A. Speranskiy; Scientific ed.: M. A. Speranskiy; Executive Eds.: N. N. Kuz'mina and A. G. Ionel';

Card 1/11

Radioactive Isotopes and Nuclear (Cont.)

SOV/5592

Tech. Ed.: A. S. Polosina.

PURPOSE : The book is intended for engineers and technicians dealing with the problems involved in the application of radioactive isotopes and nuclear radiation.

COVERAGE: This collection of 39 articles is Vol. 4 of the Transactions of the All-Union Conference of the Introduction of Radioactive Isotopes and Nuclear Reactions in the National Economy of the USSR. The Conference was called by the Gosudarstvennyy nauchno-tekhnicheskiy komitet Sovet Ministrov SSSR (State Scientific-Technical Committee of the Council of Ministers of the USSR), Academy of Sciences USSR, Gosplan SSSR (State Planning Committee of the Council of Ministers of the USSR), Gosudarstvennyy komitet Soveta Ministrov SSSR po avtomatizatsii i mashinostroyeniyu (State Committee of the Council of Ministers of the USSR for Automation and Machine Building), and the Council of Ministers of the Latvian SSR. The reports summarized in this publication deal with the advantages, prospects, and

Card 2/11

Radioactive Isotopes and Nuclear (Cont.)

SOV/5592

development of radioactive methods used in prospecting, surveying, and mining of ores. Individual reports present the results of the latest scientific research on the development and improvement of the theory, methodology, and technology of radiometric investigations. Application of radioactive methods in the field of engineering geology, hydrology, and the control of ore enrichment processes is analyzed. No personalities are mentioned. There are no references.

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REZVAKOV, B. A., KANTOR, Solomon A., DENISIK, S. A., DYAPKIN, I. G., and
KOZHEVNIKOV, D. A. (4)

"Some theoretical problems of neutron well-logging."

report to be submitted for the Conference on Nuclear Geophysics,
Krakow, Poland, 24-30 Sept 1962.

ACCESSION NR: AT4001511

S/3035/63/000/000/0080/0117

AUTHORS: Polyachenko, A. L.; Kantor, S. A.

TITLE: Time-wise asymptotic propagation of neutrons during pulsed neutron logging

SOURCE: Yadernaya geofizika. Vy*pusk 1963 g. Moscow, 1963, 80-117

TOPIC TAGS: geophysics, geophysical prospecting, neutron asymptotic propagation, pulsed neutron logging, neutron propagation

ABSTRACT: In order to disclose the most important relationships between the reading of a pulsed neutron logging equipment and the parameters of the investigated minerals, the diameter of the well, and the properties of the medium filling the well, a simplified approach is used, in which the pulse source is assumed to be a point emitting thermal neutrons. The differential equations of this boundary problem are solved by the integral transformation method

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ACCESSION NR: AT4001511

with successive application of the direct Laplace transform (with respect to the time), Fourier transform (with respect to the well axis), and Fourier-Bessel transform (with respect to the radial coordinate), and with subsequent inverse transformations. The cases of strong and weak absorption are considered separately. The mathematical results are interpreted physically and an approximate connection is obtained between the diagrams of pulsed neutron-neutron logging and the sought properties of the rocks, and also allow an estimate of the dependence of the relative differentiation of the different beds on the radius of the well, on the parameters of the rocks, on the time, and on other factors. The numerous conclusions resulting from the analysis of the solutions lead to the recommendations that in interpreting the well-measurement data it is necessary to establish first of all whether the absorption is weak or strong, and that weak absorption will be most frequently encountered for most applications of neutron-neutron logging, particularly in the logging of oil and gas wells. Orig. art. has: 13 figures, 135 for-

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ACCESSION NR: AT4001512

S/3035/63/000/000/0126/0134

AUTHOR: Kantor, S. A.

TITLE: Depth of rock investigations using pulsed neutron logging with fast neutron sources

SOURCE: Yadernaya geofizika. Vy*pusk 1963 g. Moscow, 1963, 126-134

TOPIC TAGS: geophysics, geophysical prospecting, neutron logging modeling, neutron logging, pulsed neutron logging, pulsed neutron neutron logging, pulsed neutron logging method, neutron logging method, neutron logging limit, pulsed neutron logging limit, neutron, logging depth limit, neutron neutron logging method, pulsed neutron logging computation, pulsed neutron logging modeling

ABSTRACT: Following an earlier theoretical study of the depth to which mineral rocks can be investigated by pulsed neutron logging with a thermal-neutron source (Prikladnaya geofizika No. 29, Gos-

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ACCESSION NR: AT4001512

toptekhhizdat, 1961) the author investigates the operating range of more realistic equipment, in which the neutrons are produced by D-T reactions and have an energy of about 14.2 MeV. It is shown that if the Fermi-age equation is applied to the distribution, the calculations simplify to agree with those performed by the author on thermal neutrons (Prikladnaya geofizika No. 29, Gostoptekhhizdat 1961). A cylindrical model of infinite height is used to determine the operating radius of the equipment, and it is also assumed that no neutrons are reflected from the walls of the model. It is shown that the radius in which minerals can be investigated by pulse neutron logging with a fast-neutron source is much larger than when thermal neutrons are used, at least for times up to 4000 microseconds. With increasing exposure time the radius increases more slowly with a fast-neutron source than with a thermal source. The higher the water content of the medium surrounding the depth logging instrument the greater the gain afforded by pulse neutron-neutron logging with thermal neutrons over ordinary stationary neutron-neutron

Card 2/3

ACCESSION NR: AT4001512

logging. Orig. art. has: 2 figures, 28 formulas, and 2 tables.

ASSOCIATION: None

SUBMITTED: 00

DATE ACQ: 30Nov63

ENCL: 01

SUB CODE: AS

NO REF SOV: 003

OTHER: 001

Card 3/43

ALEKSEYEV, F.A., doktor geol.-miner. nauk, prof., red.; KANTOR,
S.A., kand. tekhn. nauk, red.; KUZ'MINA, N.N., ved. red.;
POLOSINA, A.S., tekhn. red.

[Nuclear geophysics, 1963] Iadernaia geofizika; vypusk 1963.
Moskva, Gostoptekhnizdat, 1963. 246 p. (MIRA 16:12)
(Nuclear geophysics)

KANTOR, S. A.

Regulation of turbomachines. Moskva, Gos. nauchno-tekhn. izd-vo
mashinostroit. lit-ry, 1946. 199 p. (55-44280)

TJ267.K3

KANTOR, S.

PA 37/49T18

USSR/Engineering
Turbines, Steam

Jul/Aug 48

"Letter to the Editor on Zhiritskiy's Review of Their
Book," I. Kirillov, S. Kantor, $\frac{1}{2}$ p

"Kotloturbostroy" No 4

Apology to Zhiritskiy for accidental omission of
acknowledgement of use made of Zhiritskiy's work
(see 37/49T19).

718

37/49T18

KANTOR, S.A., professor

Isothermal expansion in gas turbine installations. Trudy LPI no.2:5-10
'54. (Gas turbines) (MIRA 8:8)

KANTOR, S.A., professor.

Using linear analysis for complicated gas turbine plant calculations.
Trudy VNITOGS 6 no.3:113-128 '55.

(Marine gas turbines) (Linear equations)
(Automatic control)

(MLBA 10:4)

KANTOR, Solomon Abramovich; SEEDYUKOV, S.A., nauchnyy redaktor; ALIKSEYENVA,
M.N., redaktor; FEDUKIN, P.S., tekhnicheskiiy redaktor

[Control of ship thermal power units] Regulirovanie sudovykh
teplosilovykh ustanovok. Leningrad, Gos. soiusnoe izd-vo sudostroit.
promyshl., 1956. 342 p. (MIRA 10:4)
(Automatic control) (Marine engines)

KIRILLOV, I.I., prof.; KANTOR, S.A., prof., retsentsent; KANAYEV, A.A.,
kand.tekhn.nauk, retsentsent; YABLONIK, R.M., kand.tekhn.nauk, red.;
MOISEL', B.I., tekhn.red.

[Gas turbines and gas-turbine units] Gazovye turbiny i gazo-
turbinnye ustanovki. Vol.2 [Gas-turbine units] Gazoturbinnye
ustanovki. 1956. 318 p. (MIRA 12:3)

1. Beshitskiy institut transportnogo mashinostroyeniya (for
Kirillov).

(Gas turbines)

KIRILLOV, I.I., professor; KANTOR, S.A., professor, retsentsent; KANAYEV, A.A.,
kandidat tekhnicheskikh nauk; retsentsent; YABLONIK, R.M., kandidat
tekhnicheskikh nauk, redakter; MOHEL' B.I., tekhnicheskii redakter.

[Gas turbines and gas turbines installations] Gasevye turbiny i gase-
turbinye ustanovki. Moskva, Gos.nauchno-tekhn.isd-vo mashinostroit.
lit-ry. Vol.1. [Gas turbines and compressors] Gasevye turbiny i kom-
pressory. 1956. 434 p. (MIRA 9:6)

1. Beshitskiy institut transportnogo mashinostroyeniya (for Kirillov).
(Gas turbines)

KANTOR, S.A. ~~avtor~~ avtor tekhn.nauk, prof.; ORLOV, K.V., kand.tekhn.nauk

Improving the control system for power installations by means
of a secondary load pulse. Energomashinostroenie 4 no.2:14-17
P '58.

(Automatic control)

(MIRA 11:4)

KANTOR, S. A.

26(1,5);14(0)

PHASE I BOOK EXPLOITATION SOV/3135

Budyka, Ivan Nikolayevich, Viktor Ivanovich Bulanin, Solomon Abramovich Kantor, and Konstantin Georgiyevich Rodin

Atlas konstruktsey parovykh i gazovykh turbin (Atlas of Steam and Gas Turbine Designs) Moscow, Gosenergoizdat, 1959. 9,000 copies printed. 1. Opisatel'naya chast' (Part I. Descriptive Part) 130 p. 2. Chertezhi (Part II. Drawings) 118 p.

Ed.: S. A. Kantor, Professor; Tech. Ed.: A. A. Zabrodina.

PURPOSE: This atlas is intended for students taking advanced courses in turbine design. It may also be useful to personnel of design offices in plants and planning organizations.

COVERAGE: Drawings and descriptions of basic types of Soviet steam and gas turbines are presented. Rated capacities and such auxiliary equipment as surface condensers and steam-jet ejectors are discussed. Book I contains the descriptions and general information for each turbine type, while Book II contains the drawings. The drawings in Book II correspond to the turbine types listed in Book I. For Part I of the text the corresponding

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Atlas of Steam (Cont.)

SOV/3135

drawings are found on Sheets 1-1 to 1-21 on pages 3 to 23 in Book II. For Part II the drawings are on Sheets 2-1 to 2-26 on pages 24 to 61; for Part III, Sheets 3-1 to 3-4 on pages 57 to 61; for Part IV, Sheets 4-1 to 4-25 on pages 62 to 89; for Part V, Sheets 5-1 to 5-10 on pages 90 to 101; and for Part VI, Sheets 6-1 to 6-17 on pages 102 to 118. The following are expansions of the three-letter designations of turbine types listed, indicating the plant where they are designed or manufactured: LMZ, Leningradskiy metallicheskiy zavod (Leningrad Metal Plant); KhtZ, Khar'kovskiy turbinnyy zavod imeni S.M. Kirova (Khar'kov Turbine Plant imeni S. M. Kirov); UTZ, Ural'skiy turbomotornyy zavod (Sverdlovsk Ural'skiy Turbine Plant); NZL, Nevskiy mashinostroitel'nyy zavod imeni V.I. Lenina (Leningrad Nevskiy Machinery Plant imeni V. I. Lenin); and KTZ, Kaluzhskiy turbinnyy zavod (Kaluzhskiy Turbine Plant). The atlas was compiled by members of the Turbine Construction Department, Leningradskiy politekhnicheskii institut imeni M. I. Kalinina (Leningrad Polytechnical Institute imeni M. I. Kalinin). I. N. Budyka wrote Parts III and IV; V.I. Bulanin wrote Part I, Paragraphs 10, 11, and 13 of Part II, and Paragraph 18 of Part IV; S. A. Kantor wrote Part VI; and K. G. Rodin wrote Parts II and V. The authors

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Atlas of Steam (Cont,)

SOV/3135

thank Professor A. V. Shcheglyayev, Corresponding Member, Academy of Sciences, USSR, for reviewing the manuscript. There are no references.

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Introduction

Part I. Small-capacity Steam Turbines

7

1. Turbines for driving auxiliary mechanisms 9
2. KTZ OR-300-1 back-pressure turbine 10
3. KTZ AP-0.75 and KTZ AP-1.5 extraction turbines 11
4. KTZ AK-4-2 condensing turbine 17
5. Subassemblies and elements of small-capacity turbines 20
6. Auxiliary equipment for small-capacity turbine plants 25

Part II. Medium-capacity Steam Turbines

1. NZL CR-26 floor-type normal-pressure condensing turbine with a speed reducer 31

Card 3/7

KANTOR, S.A., doktor tekhn.nauk, prof.

Improving control processes of a gas-turbine unit on account of
supplementary pulses. Izv.vys.ucheb.zav.; mashinostr. no.2:52-58
'60. (MIRA 14:4)

(Gas turbines)

(Automatic control)

30237

S/145/60/000/002/005/020
D221/D302

26.2194

AUTHOR: Kantor, S.A., Doctor of Technical Sciences, Professor

TITLE: Improving gas turbine control processes with
additional pulses

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Mashino-
stroyeniye, no. 2, 1960, 52 - 58

TEXT: Notwithstanding the complexity of a gas turbine, its control can be arranged on the basic principles of Watt and Polzunov. This ensures stability of part of static characteristics and eliminates self-oscillations. With a sensitive element of regulation it is possible to meet more stringent requirements, and the author quotes designs of the Moskovskiy energeticheskiy institut (Moscow Power Institute) and VTI. In order to improve control, the author proposes application of additional pulse proportional to the load. A reliable indicator of the active load of the generator is a prerequisite for this arrangement. The Kafedra turbostroyeniya i avtomatiki Leningradskogo politekhnicheskogo instituta im. Kalinina

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30237

Improving gas turbine control ...

S/145/60/000/002/005/020
D221/D302

(Department of Turbine Construction and Automation of Leningrad Polytechnic Institute im. Kalinin) developed a type of load regulator that may be used for improving the gas turbine operation. It is based on summation of forces acting on the armature in a two-coil relay fed by the voltage and amperage of the generator. The static curves of load regulation obtained by a simple modification of the above exhibits a certain hysteresis. The load feedback can be realized by parallel connection of the speed regulator with the load controller. In gas turbines it is necessary to compensate the spurious effect of internal accumulators. The use of decaying pulses as per the author's certificate no. 111356, and shown in Fig. 5, may be advantageous. This arrangement can be supplemented by a moving spring anchorage (in dotted lines). The author describes the design of A.I. Potapov of the above-mentioned Institute, where bellows are applied. The effectiveness of additional load feedback is illustrated graphically. There are, however, some limitations due to the maximum temperature allowed in the upstream of the turbine, and also in the case of disturbances in energy supply. The increase of load oscillations depends on the ratio of frequencies of the

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30237

S/145/60/000/002/005/020
D221/D302

Improving gas turbine control ...

exciting phenomenon and that of the regulating system. Calculations made by Candidate of Technical Sciences, K.V. Orlov indicate that the ratio of amplitudes of oscillations with or without a regulator is greater than unity only at low frequencies of the exciting phenomenon. There are 10 figures.

ASSOCIATION: Leningradskiy politekhnicheskiy institut (Leningrad Polytechnic Institute)

SUBMITTED: December 15, 1959

Card 3/4 3

KANTOR, S.A., doktor tekhn.nauk, prof.; ORLOV, K.V., kand.tekhn.nauk;
~~POTAPOV, A.I., inzh.~~

Testing of a control system taking into account additional load
impulses. Izv. vys. ucheb. zav.; energ. 6 no.10:61-67 0 '63.
(MIRA 16:12)

1. Leningradskiy politekhnicheskoy institut imeni M.I.Kalinina.
Predstavlena kafedroy turbinostroyeniya.

ACCESSION NR: AP4007242

S/0114/63/000/012/0012/0015

AUTHOR: Kantor, S. A. (Professor, Doctor of technical sciences);
Arsen'yev, L. V. (Docent, Candidate of technical sciences)

TITLE: GTU (gas turbine unit) gas inlet temperature measurement based on indirect parameters

SOURCE: Energomashinostroyeniye, no. 12, 1963, 12-15

TOPIC TAGS: turbine inlet temperature, temperature measurement, gas turbine, gas temperature measurement, turbine temperature measurement, turbine regulation, turbine temperature

ABSTRACT: The direct measurement of gas temperature before the gas turbine, for the purpose of automatic control, is difficult and unreliable because of the nonuniform gas temperature and low gas velocities (60-80 m/sec) causing low sensitivity of thermocouples. Hence, a method of indirect measurement is considered in the article. The inlet gas temperature can be determined in terms of the outlet gas temperature (under stable temperature field and higher gas velocity conditions), the turbine efficiency, and the expansion ratio. It is pointed

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ACCESSION NR: AP4007242

out that theoretically the accuracy of measuring the inlet temperature depends on that of the outlet temperature and practically does not depend on the efficiency, since the latter varies only within 2-3% under actual operating conditions of the turbine. The expansion ratio can be conveniently determined in practice from the pressures measured before and beyond the turbine. In the case of a single-shaft turbine, measuring the outlet temperature and the inlet pressure is sufficient. A hydraulic type of temperature controller is suggested and its possible characteristics are discussed. Another type, based on the electric ratiometer principle, was built and tested by Engineer Yu. A. Yemel'yanov. This controller operates on the outlet temperature and both pressures. It was tested with a GT-700-5 gas-turbine unit and exhibited an error not exceeding 6C. Orig. art. has: 6 figures, 9 formulas, and 1 table.

ASSOCIATION: Leningradskiy politekhnicheskoy institut im. M. I. Kalinina
(Leningrad Polytechnic Institute)

SUBMITTED: 00

DATE ACQ: 24Jan64.

ENCL: 00

SUB CODE: PR

NO REF SOV: 000

OTHER: 000

Card 2/2

L 27775-65 EPR/ENG(v)/ENG(s)/2/ENT(s)/ENT(1)/ENT(m)/EPA(bb)-2/T-2/EWA(d)/EWP(w)/

EWP(g) Ps-5/Ps-4/Ps-4 EN WW

ACCESSION NR AT 000318

0563 62 000 112 0024 0030

AUTHOR: Arsen'yev, L. V., Kantor, S. A.; Orlov, K. V.

TITLE: Improvement of the static and dynamic properties of a transportable gas turbine engine by installing a controllable nozzle device within the power turbine

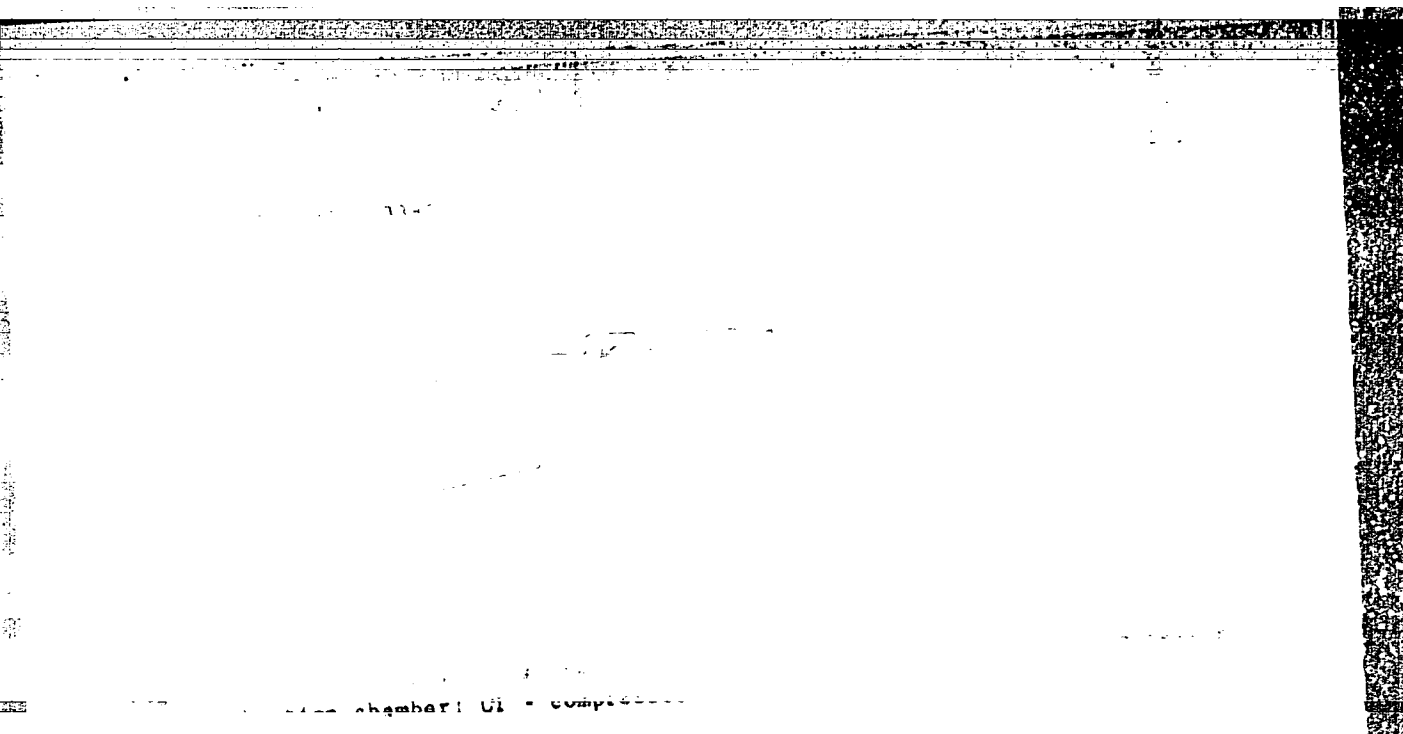
SOURCE: Leningrad. Politekhnikheskiy institut. Trudy, no. 232 1964. Turbomashiny (Turbomachines), 26-30

TOPIC TAGS: gas turbine, movable gas turbine, variable load gas turbine, variable compression gas turbine, constant temperature gas turbine, gas turbine efficiency

ABSTRACT: Movable gas turbines in the Soviet Union are still in the experimental phase and the greatest difficulties are encountered in connection with the poor engine operating against variable loads. The article presents the operating characteristics of a movable gas turbine test stand according to the data shown in Fig. 1 of the test stand. The test stand was used to carry out the experiments. The experiments were carried out at the average load of the engine. The results of the experiments show that the appropriate efficiency of the engine is maintained under all operating conditions. The effect of the load on the efficiency of the engine is shown in Fig. 2.

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CC-6 COMBUSTION
 1044

FWT(d)/EWT(m)/EWA(d)/EWP(w) EM

1977-1978

17

1. S. A. ...

... of profile energy losses in lattice ...

... Turbomachinery, ...

TOPIC TAGS: steam turbine, turbine efficiency, high power turbine, turbine loss, blade profile, thick blade profile, blade lattice

The modern terminal stages of steam turbines contain thick-profile blades which are much more efficient than the corresponding thin blades. The efficiency of the thick-blade stages is higher than that of the thin-blade stages. The static nozzle ...

L 27777-65
ACCESSION NR: AT5003386

thin profile lattice. These are reduced primarily by appropri-
ate profiles, particularly of the type of the lattice, which
metal and are also of the type of the lattice, which
formula and 6 figures.

ASSOCIATION
(Ingrad polytechnic institute)

ENC

SUB CODE: PR

... Kantor, S. A. (Doctor of Economics)
...
...

SOURCE: Toplenergetika, no. 5, 1965, -7.

... turbine, power plant, compressor, combustion chamber

Card 1/3

L 52313-65

ACCESSION NR: AP5011770

1 the combustion chamber, 4 the gas turbine, and 5 the intermediate cooler.
2 the high pressure compressor, 3 the high pressure combustion chamber,
and 6 the low pressure compressor.

ted about the possibility, and advantages of technical sciences in U. S. Navy was
back power stations, and Candidate of technical sciences in U. S. Navy was
of using liquid and gaseous

44-1770

ON 12-3-86 10

ACC NR: AP7012396

SOURCE CODE: UR'0114/67/000'001/0022/0025

AUTHOR: Kantor, S. A. (Doctor of technical sciences; Professor); Khutskiy, G. I.
(Candidate of technical sciences; Docent)

ORG: none

TITLE: Feasibility of introducing new automatic control systems into
thermoelectric power plants

SOURCE: Energomashinostroyeniye, no. 1, 1967, 22-25

TOPIC TAGS: thermoelectric power plant, industrial automatic control,
computer control system

SUB CODE: 13

ABSTRACT: The article discusses the application of computer-control systems
in thermoelectric power plants. The requirements are considered as well as
the advantages and difficulties implied. Such system would be called upon
to: 1) automatically start up and shut down turbo-generators, boilers and
intermediate-stage apparatus 2) optimize the mode of operation when the plant
is running, 3) distribute the thermal and electric load among individual units,
4) automatically control the block of units during emergency conditions, 5)
automatically reset individual regulators whenever the operating conditions
change, 6) calculate the techno-economic indicators for all individual units

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UDC: 621.311.22:62-52.001.36

8932 13/8

ACC NR: AP7012396

and for the entire plant. The authors divide all recently developed control systems into two classes: a) automatic systems which perform the functions 1) to 5) stated above and which contain computing and decision making devices with elements of logic, b) computing machines for information processing which, not provided with a feedback loop, are non-automatic but perform the function 6).

The authors explain each of these functions in detail, pointing out how an automatic computing and decision making system will perform it. This type of system holds, in their opinion, the greatest promise at the present time and such a system, rather than being treated as an offshoot of an information processing computer, should receive priority in the current trends toward improving power plant operations. Orig. art. has: 2 figures. [PMS: 40,450]

2/2

KANTOR, Sh.I., inshener.

Top-loading drying chambers for lumber. Der.prom. 5 no.11:14-15
M. '56. (MIRA 10:1)

1. Giprocavtoprom.
(Lumber--Drying)

KANTOR, Sh.Sh., inshener; CHEKHUNOV, P.Kh., inshener.

Transition to the method of washing out ash from boilers burning
pulverized anthracite. Elek. sta. 24 no.12:48-49 D '53.
(MIRA 6:12)
(Furnaces)

"APPROVED FOR RELEASE: 06/13/2000

CIA-RDP86-00513R000520420004-4

APPROVED FOR RELEASE: 06/13/2000

CIA-RDP86-00513R000520420004-4"

KANTOR, T.

USSR.

✓ Temperature of vitrification and fluidity of natural rubbers of different molecular weights. A. Tager, M. Iosadva, T. Kantor, and L. Murheva. *Zhur. Priklad. Khim.* 27 (1), 1227-28 (1954).—The mol. wt. of natural rubbers melted for different periods was detd. from the reduced viscosity-concn. plots by the relation $[\eta] = KM^a$, where $[\eta]$ is the intrinsic viscosity, K and a are const., and M is the mol. wt. From the degree of deformation as a function of the temp. detd. by the method of Kargin, *et al.* (*C.A.* 43, 7204), it was shown that the mol. wt. affected the temp. of the initial fluidity but not that of vitrification. I. Benicovich.

KANTOR, T.

102. Spectroscopic studies of Al-plasma in nitrogen atmosphere. 3
T. KANTOR, A Magyar Tudományok Akadémiájának Közlönyei (Proceedings of the
Central Research Institute for Physics of the Hungarian
Academy of Sciences), Vol. 6, 1954, No. 1-2, pp. 58-65,
3 figs., 2 tabl.

A description is given of a gas cell which is airtight
even for counter electrodes are generating processes with
large metal bodies. Excitation in air, argon and nitrogen
atmospheres are compared in respect to the spectroscopic
analysis of aluminium. Arc discharge is more suitable in
nitrogen atmosphere and the disturbing oxide bands in the
visible spectrum are eliminated, sensitivity and accuracy
are increased. From among the usual counter electrode materials carbon has been found the most suitable.

KANTOR, T. (Budapest, XI., Gellert ter 4)

Elimination of "self-ignition" of low-voltage a.c. arc.
Periodica polytechn chem 6 no.4:217-220 '62.

1. Institute for General Chemistry, Technical University,
Budapest; Academic Research Group of Technical Analytical
Chemistry. Presented by Prof. D. L. Erdey.

KANTOR, Tibor(Budapest)

Use of an electrode support with direct water cooling and an open gas cell in emission spectral analysis. Kem tud kozl MTA 15 no.2: 123-134 '61.

1. Budapesti Műszaki Egyetem Általános Kémiai Tanszéke.

(Electrodes) (Spectrum analysis)

L 47233-66 LIP(c)
ACC NO: 476034307

SOURCE CODE: HU/0005/66/000/006/0268/0269

AUTHOR: Erdely, László; Kantor, Tibor

ORG: Academic Research Group of Technical Analysis, Department of General Chemistry,
Technical University, Budapest (Műszaki Egyetem, Általános-Kémiai Tanszék, Műszaki
Analitikai Akadémiai Kutató Csoport)

TITLE: Continuous introduction of powdered substances into spectroscopic light sources

SOURCE: Magyar kémiai folyóirat, no. 6, 1966, 268-269

TOPIC TAGS: spectroscopy, spectroscopic analysis

ABSTRACT: A device is described which can be used for the continuous introduction of solid, powdered materials into arc and spark light sources. The substance is introduced through a tube-electrode with the aid of a crew spindle which is rotated at a constant speed by an electric motor. The "tube-electrode method" is simple and versatile, and can be applied in various spectroscopic analyses. Orig. art. has: 1 figure. [JPRS: 36,862]

SUB CODE: 20 / SUBM DATE: 26Sep65 / ORIG REF: 002 / OTH REF: 010

Card 1/1 hs

KANTOR, Tibor

Use of the comparative iron spectrum in the quality and quantity investigations performed by a spectroscope. Magy kem folyoir 66 no. 12:491-493 D '60.

1. Budapesti Muszaki Egyetem Altalanos Kemiai Tanszeke.

CEGUS, Erno; KANTOR, Tibor

Home-made spectrographic appliances. Magyar korn lap 18 no.2/3:
141-144 P-Mr '63.

1. Vasipari Kutato Intezet.

ERDEY, László; KANTOR, Tibor; KOCSIS, Elemer; TESZYNE VANDORFFY, Mária

Quantitative spectrum analysis of metal layers produced by vacuum evaporation. Magyar kémiai folyóirat 70 no.12:557-559 D '64.

1. Chair of General Chemistry of the Budapest Technical University. 2. Editorial Board Member, "Magyar Kémiai Folyóirat" (for Erdey).

75 KANTOR, S. Z.

BELOUSOV, A.S., inzhener; KON'SHIN, P.P., inzhener; KANTOR, S.Z.:
SEM KOV, V.D.; SPORYSHKOV, P.N.; TURITSYN, V.V.; CHIZHIKOV, Yu.M.
kandidat tekhnicheskikh nauk;

Improve the quality of hollow bore steel. Metallurg 2 no.2:21-28
F '57. (MIRA 10:4)

1. Zavod "Serp i molot" (for Belousov, Kon'shin).
 2. TSentral'naya zavodskaya laboratoriya (for Kantor).
 3. Starshiy kalibrovshchik Zavoda im. Serova (for Semkov).
 4. Nachal'nik prokatnoy laboratorii (for Sporyshkov).
 5. Rukovoditel' sortovoy gruppy TSentral'noy zavodskoy laboratorii Zavoda "Krasnyy Oktyabr'" (for Turitsyn).
 6. TSentral'nyy nauchno-issledovatel'skiy institut chernoy metallurgii (for Chizhikov).
- (Tool steel) (Boring machinery)

KONSTANTINOV, N.H.; KANTOR, T.S.

Setting up an exhibition of technical plants at the Main Botanical Garden.
Biol.Glav.bot.sada no.14:46-50 '52. (MLRA 6:5)

1. Glavnyy botanicheskiy sad Akademii Nauk SSSR.
(Plants, Cultivated--Exhibitions)

KANTOR, T.S.

Activity of chlereoplasts in the flax embryo. Biul.Glav.bet.sada
no.23:61-67 '55. (MIRA 9:7)

1.Glavayy botanicheskiy sad Akademii nauk SSSR.
(Flaxseed) (Chromatophores)

KANTOR, T. S.

KANTOR, T. S.: "A comparative embryological investigation of cultivated flax and certain of its wild relatives." Moscow State U imeni M. V. Lomonosov. Soil Biology Faculty. Moscow, 1956
(Dissertation for the degree of Candidate of Biological Sciences)

SO: Knizhnaya Letopis', No 36, 1956, Moscow.

KANTOR, T.S.

KANTOR, T.S.

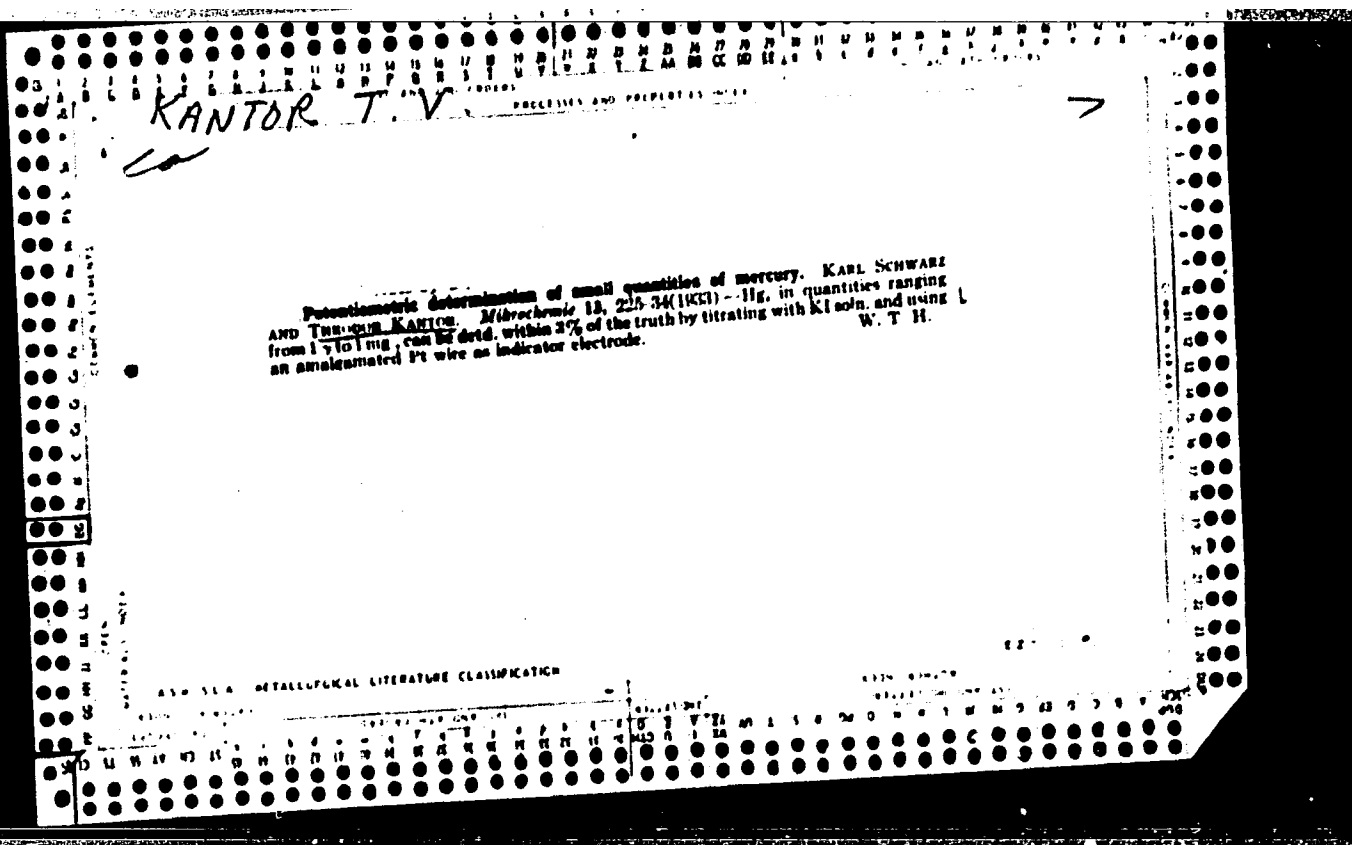
~~Embryology~~ of cultivated flax. Biul. Glav. bot. sada no.29:48-60 '57.
(MIRA 11:1)

1. Glavnyy botanicheskiy sad AN SSSR.
(Flax) (Botany--Embryology)

SMIRNOVA, Ye.S.; KANTOR, T.S.; FURST, G.G.

Biology of *Colocasia antiquorum* (L.) Schott. *Biul. Glav. bot. sad*
no. 52:52-67 '64. (MIRA 17:4)

1. Glavnyy botanicheskiy sad AN SSSR.



COMMON ELEMENTS										COMMON VARIABLES									
COMMON ELEMENTS										COMMON VARIABLES									
<div style="text-align: center;"> <h1>KANTOR, T. V.</h1> </div>										<div style="text-align: center;"> <h2>PROCESSES AND PROPERTIES INDEX</h2> </div>									
<div style="text-align: center;"> <h3>1</h3> </div>																			
<p> <u>*Preparation of Pure Radiocopper from Zinc. A. P. Kantor and T. V. Kantor (Irad. Abad. Nost S.S.R.A., 1948, (Khim.), 307-308; Brit. Ab., 1948, [A 1], 229).—[In Russian.] Zinc powder irradiated by the cyclotron is extracted successively with 4N-HCl, 4N-H₂SO₄, and HNO₃. Electrolysis of the combined H₂SO₄ and HNO₃ extracts at 80-90° C., using platinum electrodes, at 3-6 V., for 1-5 hr., gives pure radiocopper (64%).</u> </p>																			
<div style="text-align: center;"> <h4>ASD-346 METALLURGICAL LITERATURE CLASSIFICATION</h4> </div>										<div style="text-align: center;"> <h4>82-111-1</h4> </div>									
<div style="text-align: center;"> <h4>100000 #1</h4> </div>										<div style="text-align: center;"> <h4>100000 #1</h4> </div>									
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KANTOR, T. V.

KANTOR, TV, RATNER, AP

ADSORPTION OF MESOTHORIUM II ON BARIUM SULPHATE COMPTES RENDUS (DOKLADY)
Vol LII, No. 1, 1946.

KANTOR, VIERA

✓ The marcasite mineralization at Tepličany, north of
Kotice. Viera Kantor and Ján Kantor (Geol. Inst., Bratislava,
Czech.). Geol. Sborník 8, 81-103 (1953) (German summary).—Marcasite occurs in radiating spherulitic con-
cretions, many resembling the so-called mineralized bacteria,
in a conglomerate that contains rhyolitic tuff. Chem. analy-
ses of 2 rocks are given. Michael Fleischer

Kantor, V.B.

NAUMOV, A.N., inzhener, redaktor; POTOTSKIY, G.I., inzhener; KANTOR, V.B.,
inzhener, redaktor; VERINA, G.P., tekhnicheskiiy redaktor

[Progressive working methods in the management of the railroad
track] *Peredovye metody truda v putevom khsiaistve. Moskva,*
Gos.transp.shel-dor. izd-vo, 1955. 207 p. (MIRA 9:3)
(Railroads--Track)

KANTOR, V.B., insh.; MIKONI, V.V., insh.

Reserves for increasing train speed through switch boxes. Zhel.
dor.transp. 40 no.11:43-48 W '58. (MIRA 11:12)
(Railroads--Train speed) (Railroads--Switches)

KANTOR, V.B., insh.; KOLYADA, G.I., insh.

Approval has been given for the use of graphite grease
for the lubrication of rail bonds. Put' i put.khoz. no.11:
12-13 M '59. (MIRA 13:4)

1. Nachal'nik tekhnicheskogo otдела Glavnogo upravleniya puti i
sooruzheniy (for Kantor). 2. Nachal'nik otдела signalizatsii,
tsentralizatsii i blokirovki Glavnogo upravleniya signalizatsii
i svyazi (for Kolyada).

(Electric railroads—Rails) (Graphite)
(Lubrication and lubricants)

KANTOR, V.B.; POTOTSKIY, G.I., red.; KHITROV, P.A., tekhn. red.

[Leaders in outstanding track maintenance] Masters otlichnogo so-
derazhaniia puti; sbornik statei. Moskva, Vses. izdatel'sko-poligr.
ob"edinenie M-va putei soobshcheniia, 1960. 78 p. (MIRA 14:7)
(Railroads--Employees)

KANTOR, V.B., inzh.

Track spacing should be filled with ballast. Put'i put.khos. 4
no.7:38 J1 '60. (MIRA 13:7)
(Railroads—Track)

NALICHAYEV, Vladimir Nikolayevich, inzh.; FEDULOV, Vasily Fedorovich,
inzh.; KANTOR, V.B., inzh., retsenzent; SERGEYEVA, A.I., inzh.,
red.; USENKO, L.A., tekhn. red.

[Tracklaying and maintenance of tracks with reinforced-concrete
ties; practices of track machinery points and track divisions]
Ukladka i sodержanie puti na zhelezobetonnykh shpalakh; opyt
putevykh mashinnykh stantsii i distantsii puti. Moskva, Vses.
izdatel'sko-poligr.ob'edinenie M-va putei soobshchenia, 1961. 69 p.
(MIRA 14:12)

(Railroads—Maintenance and repair) (Railroads—Ties, Concrete)

SHVAREV, Boris Leonidovich; KANTOR, V.B., inzh., retsentsent; SERGEYEVA,
A.I., inzh., red.; KHITROVA, M.A., tekhn. red.

[Lengthening the service life of wooden ties] Prodlenie sroka
sluzhby dereviannykh shpal. Moskva, Vses. izdatel'sko-
poligr. ob"edinenie M-va putei soobshchenia, 1962. 45 p.
(MIRA 15:3)

(Railroads--Ties)

KANTOR, V. E.

Promote the activities of inventors. Put' i put. khoz. 7 no.3:
37-39 '63. (MIRA 16:4)

1. Nachal'nik byuro po delam izobretatel'stva Glavnogo uprav-
leniya puti i soderzheniy Ministerstva putey soobshcheniya.

(Technological innovations)

RYABINOV, M.G.; VOLYNSKIY, R.F.; KANTOR, V.B., inzh., retsenzent;
SERGEYEVA, A.I., inzh., red.

[Track division of communist labor; work practices of the
Tartu track division of the Baltic Railroad] Distantiia
puti kommunisticheskogo truda; opyt raboty Tartuskoj dis-
tantsii puti Pribaltiiskoi dorogi. Moskva, "Transport,"
1964. 60 p. (MIRA 17:4)

KANTOR, V.B., inzh.

Institute of Technological Progress. Put' i put. khoz. 8 no.9:
9 '64. (MIRA 17:11)

1. Zaveduyashchiy ushebnay chas'ya fakul'teta "Put' i stroitel'-
stvo" Instituta tekhnicheskogo progressa Ministerstva putey soob-
shcheniya.

S/108/60/015/05/05/008
B007/B014

AUTHOR: Kantor, V. M., Member of the Society

TITLE: Calculation of the Circuits of Rectifiers With Voltage Multiplication

PERIODICAL: Radiotekhnika, 1960, Vol. 15, No. 5, pp. 55-59

TEXT: The present paper shows that it is possible to use the simplified method for calculating the voltage multiplier reproduced in Fig. 1. The principal formulas are derived. The multiplication number n , the rectified voltage E_0 , and the load current I_0 are assumed to be given. Moreover, the author assumes an infinitely high capacity, constancy of the resistance for open valves, a pure internal ohmic resistance of the source, and an operation of the valve without phase shift. Fig. 2 shows the equivalent-circuit diagrams of the multiplier during that part of the negative half-period of the emf of the source in which the odd valves are open and during that part of the positive half-period in which the

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✓B

Calculation of the Circuits of Rectifiers
With Voltage Multiplication

S/108/60/015/05/05/008
B007/B014

even valves are open. An analysis shows that in the case under consideration the multiplier is equivalent to that of an ordinary rectifier with a capacitive output. Calculation formulas are derived next, and the pulsation of the rectified voltage is studied. Formulas (16a) and (16b) are derived for the determination of the capacitance warranting the permissible maximum pulsation. With the help of the formulas derived it is possible to carry out a complete analytical calculation of a rectifier with voltage multiplication according to the simplified calculation of rectifiers with a capacitive output. It is finally pointed out that a comparison between experimental and calculated data for a rectifier with selenium valves showed a maximum divergence of 10%. There are 3 figures and 6 references: 5 Soviet and 1 English.

SUBMITTED: August 2, 1958 (initially) and
May 20, 1959 (after revision)

✓B

Card 2/2

KANTOR, V.M.

Calculation of rectifier circuits with voltage multiplication.
Radiotekhnika 15 no. 5:55-59 My '60. (MIRA 14:4)

1. Deystvitel'nyy chlen Nauchno-tekhnicheskogo obshchestva
radiotekhniki i elektrosvyazi.
(Electric current rectifiers)

BUZINIYER, M.I.; VOROPAY, A.P.; DRUGOV, I.P.; YEVDOKIMOV, I.I.; KANTOR,
V.V.; KOMARNITSKIY, Yu.A.; MAKSIMENKO, I.I.; PAVLOVSKIY, V.V.;
CHERNODNICHENKO, Ye.T.; FATEYEV, P.Ya., red.; VERINA, G.P.,
tekhn.red.

[Socialist competition in railroad transportation; collected
articles] Sotsialisticheskoe sorevnovanie na zheleznodorozh-
nom transporte; sbornik statei. Moskva, Gos.transp.zhel-dor.
isd-vo, 1959. 222 p. (MIRA 12:12)
(Railroads)

22200

S/072/61/000/005/001/001
B105/B226

9.4300 (1145, 1153, 1043)

AUTHORS: Budnikov, P. P., Academician
Kantor, Ya. M.

TITLE: Hardness measurement of electro- and radiotechnical
ceramic products

PERIODICAL: Steklo i keramika, no. 5, 1961, 18 - 24

TEXT: This paper presents the results of experiments performed to determine the optimum methods of hardness measurement to be applied in studying the properties of electrotechnical porcelain and high-frequency ceramics. The following methods have been tested: measurement of micro-hardness, static indentation on a Rockwell hardness tester, and measurement by means of sandblast and the method of mutual grinding. The investigations have been carried out with electrotechnical porcelain of zavod "Izolyator" ("Izolyator" Works) (paste M - 23) and zavod "Uralizolyator" ("Uralizolyator" Works) (paste 143 and paste mixed with alumina $\Gamma\Phi$ (GF)), with steatite ceramic products, i. e., calcium steatite (TK - 21) and barium steatite CK - 1 (SK - 1), with mullite corundum (MK) and corundum

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S/072/61/000/005/001/001
B105/B226

X
✓

Hardness measurement ...

(K) ceramic products. Measurement of microhardness has been performed by means of a ПМТ-3 (PMT - 3) hardness gauge, the load of the diamond crown amounting to 100 g. Results of measurement are given in Table 1. Tests have been carried out with three highly sintered specimens (water absorption $\leq 0.02\%$), with a plastic indentation being present. Furthermore, experimental studies for measuring the hardness of ceramic materials by the Rockwell method are described. Three sintered specimens of each material burned under different conditions have been investigated by means of a TK - 2 hardness gauge. The hardnesses of all specimens were determined according to the scales "A", "B", and "C". Table 2 gives the values of hardness of sintered ceramic materials according to Rockwell. Photographs of the crown indents of the hardness gauge on M - 23, MK, and K specimens are described. [Abstracter's note: Photographs of Figs. 1, 2, and 3 are not reproducible.] Hardness data according to scale "B" for all materials exceed the upper limit of scale (100) which is specified by OCT 10242-40 (OST 10242-40). Due to a decrease of sensitivity, the measurement according to scale "B" cannot be recommended for ceramic materials. Due to brittleness, hardness determination of porcelain

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S/072/61/000/005/001/001
B105/B226

Hardness measurement ...

specimens according to scale "C" cannot be performed. When measuring the hardness of steatite and highly aluminous materials according to scale "A", fairly constant results are obtained. Investigations carried out showed that, for determining hardness of electrotechnical porcelain by means of static indentations, a new device of the Rockwell type should be built, having a diamond crown of smaller dimension, a 0.1-mm radius of curvature, and using smaller loads. Attempts of hardness measurements by means of a sandblast have been performed at the Moskovskiy instrumental'nyy zavod "Kalibr" (Moscow Tool Factory "Kalibr"). Results of measurements are given in Table 3. The low sensitivity due to the small excavation depth of some materials is the deficiency of this method. The hardness determination according to the method of mutual grinding has been theoretically founded and experimentally verified by Academician V. D. Kuznetsov. The quantity of the ground-off materials has been converted into volumes (Table 4). The dependence of the hardness of ceramic materials on their open porosity at the end of the sintering period is shown in Fig. 4. The value of specific productivity of the grinding process is regarded as a criterium of the

grinding power. Specific productivity q (cm^3/cm^3) - $\frac{Q_1}{Q_2}$, Q_1 denoting the

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B105/B226

Hardness measurement ...

grinding productivity in cm^3/min and Q_2 the abrasion of the grinding tool per working cycle. The specimens were ground by means of grinding wheels of the K360M2k (KZ60M2k) profile on a 371M plane grinding machine. Results are given in Table 5. Each of the ceramic materials has its individual optimum method of hardness measurement. For none of the ceramic products, the method of mutual grinding can be considered as to be an optimum. Finally, a systematic determination of hardness as a characteristic of their durability is recommended in studying the properties of ceramic materials. Hardness measurement can also be employed as a rapid method for controlling the sintering of steatite and highly aluminous ceramic products. Hardness may be regarded as an indirect characteristic of the grinding power of ceramic materials. There are 4 figures, 5 tables, and 3 references: 2 Soviet-bloc and 1 non-Soviet-bloc.

ASSOCIATION: AN SSSR (AS USSR) [Abstracter's note: Name of association was taken from first page of journal.]

Card 4/9

24722
S/072/61/000/007/001/002
B105/B206

15.2230

AUTHORS: Budnikov, P.P., Academician AS Ukr SSR, Kantor, Ya.M.
TITLE: Efficient grinding method for products from highly aluminous ceramics
PERIODICAL: Steklo i keramika, no. 7, 1961, 29-32

TEXT: Research results of the determination of efficient methods for precision machining of highly aluminous products are given here. This is necessary since ceramic products cannot be formed to exact dimensions. In order to obtain products with exact dimensions from ceramic materials of great hardness (according to the Mohs hardness scale, over 9, and according to Khrushchov, over 1000 kg/mm^2), these must be ground mainly in a fired state by means of diamond grinding tools involving high cost. In this connection, the technology of double firing and grinding of products was elaborated as follows: The ceramic products were first heated up to partial sintering, and grinding off part of the material was made possible with customary grinding wheels of green silicon carbide. Afterwards, the products were fired up to total sintering and ground to size with diamond

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S/072/61/000/007/001/002

B105/B206

Efficient grinding method ...

grinding tools. The test was made with two high-frequency materials: mullite-corundum ceramics of the type MK (MK) and corundum ceramics of the type K (K). Samples from these ceramics were made by means of injection molding and fired at various temperatures, their water absorption, weight of unit volume, apparent porosity, linear shrinkage, hardness and static bending strength being determined. The change of shrinkage, hardness and static bending strength of the ceramic samples MK and K as a function of firing temperatures was also mentioned. The properties of the ceramic samples are further investigated in close temperature ranges, i.e., for MK from 1200 to 1260°C at intervals of 20°C, and for K from 1330 to 1460°C at firing temperatures of 1380, 1410, 1435, and 1460°C. Impact strength rigidity, specific grinding productivity, and microstructure were also determined. The change of static and impact-strength rigidity, hardness on a sandblasting device, specific grinding productivity as a function of the open porosity in % (see Fig.2) and of the firing temperature in degrees (see Fig.3) is also shown. Fig4 shows the comparative diagram for physical properties and specific grinding productivity of the samples MK and K for double and single firing, from which it follows that double firing does not change the main characteristic values of the sintered,

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Efficient grinding method ...

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B105/B206

highly aluminous ceramics. It is finally stated that, compared with single firing, double firing of MK and K does not change the modulus of elasticity, thermal stability and coefficient of linear expansion. In the microstructure of the materials, no noticeable changes are observed either. The technology of double firing for the manufacture of highly aluminous ceramic products with exact dimensions permits the use of carborundum grinding wheels, beside diamond tools, for grinding off part of the material. There are 4 figures, 2 tables and 1 Soviet-bloc reference.

Card 3/5

BUDNIKOV, P.P., akademik; KANTOR, Ya.M.

Measuring the hardness of ceramic material for electric and radio
engineering. Stek.l ker. 18 no.5:18-24 My '61. (MIRA 14:5)

1. Akademiya nauk USSR (for Budnikov)
(Ceramic materials)

KANTOR, Ya.M., insh.

High-frequency MVP-57 communication station. Trudy VNIIE no.12:137-147
'61. (MIRA 18:4)

1. KEAZ.

KANTOR, Ye.

Characteristics of the distribution of the extractive industry;
based on the example of petroleum production. Izv. Vses. geog.
ob.-va 97 no.2:112-118 Mr-Ap '65. (MIRA 18:5)

SOV/115-59-9-21/37

9(2)

AUTHOR:

Kantor, Ye.L.

TITLE:

An Electronic Low Voltage Commutator

PERIODICAL:

Izmeritel'naya tekhnika, 1959, Nr 9, pp 40-41 (USSR)

ABSTRACT:

The author describes an electronic commutator for simultaneous observation of two voltage curves of a 50-millivolt amplitude on an oscilloscope screen. The amplification factor of the switch is 20. The frequency characteristic is flat, with an error of ± 1 db from 30 cps to 500 kc. A stabilized rectifier provides the 300-volt power supply. The anode current is 80 milliamps. The heater circuits must be balanced in regard to the housing. A circuit diagram of the six-tube electronic switch is shown in Figure 1. The voltage to be commutated enter the control grids of two 6Zh2P tubes. These tubes are alternately blocked by negative pulses from a multivibrator composed of one 6N3P tube. Since the control pulses must have very flat tops to avoid a distortion of the input voltage, a second stage with one 6N3P was

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An Electronic Low Voltage Commutator

SOV/115-59-9-21/37

introduced. The 6Zh2P tube restores the direct component, thus only pulses of negative polarity are fed to the pentode grids of the two input tubes. The amplified input voltages are fed alternately to a common anode load. A cathode follower, composed of one 6Zh2P tube, controls continuously the output voltages without any noticeable phase distortion. Two DG-Ts4 diodes are used for cutting the negative overshoots. The coincidence of the two voltage curves on the oscilloscope screen is achieved by two potentiometers controlling the anode voltages. The commutating pulses are fed in addition to the differentiating circuit composed of two DG-Ts4 diodes and enter the modulating electrode of the oscilloscope tube quenching its beam at the time of commutation. A clear image of the voltage curves is achieved. The noise caused by the commutation voltage does not exceed 5% which amounts to 2.5 millivolts at an amplitude of 50 millivolts and a practically undistorted commutation is achieved. Conventional electronic switches cannot be used for commutation of such small

Card 2/3

Ax. Electronic Low Voltage Commutator

SOV/115-59-9-21/37

voltages. For example, the widely used EK-1 electronic commutator distorts the signals to be commutated when their amplitude is smaller than 1,500 millivolts. Laboratory tests were performed with the switch designed by the author with input voltages of 30 millivolts and confirmed the theoretical considerations. V.P. Ivanov participated in assembling and tuning of this electronic commutator. There are 2 circuit diagrams, 2 graphs and 1 Soviet reference.

Card 3/3

8 (2)

AUTHOR:

Kantor, Ye. L., Engineer

0629¹
SOV/119-59-11-9/13

TITLE:

The Control of the Ferromagnetic Main Characteristic of
Toroidal Cores Under Conditions of Mass Production

PERIODICAL:

Priborostroyeniye, 1959, Nr 11, pp 21-22 (USSR)

ABSTRACT:

In the introduction the faults of the testing method for ferromagnetic bodies operating with an alternating field are briefly described. The method described here permits a visual comparison of the hysteresis loop of the core to be investigated with that of a test core. A number of faults to be found in hitherto known methods of this kind are briefly discussed, and the basic scheme of these arrangements is shown in figure 1. On the fluorescent screen of the cathode-ray tube the induction-versus-field-strength function, i.e. the hysteresis loop, is represented. Next, the block diagram of the described FSh-1 ferrograph is discussed. The magnetic coil has one winding and is represented by the rod (1), whereas the measuring coil consists of two windings and is represented by the contact (2-9) and the plates (10-13). By this arrangement a rapid exchange of the annular cores to be investigated is made possible. On the fluorescent screen the hysteresis

Card 1/2

S/119/62/000/005/007/009
D201/D303

AUTHOR: Kantor, Ye.L.

TITLE: An installation for automatic control of discrete quantities

PERIODICAL: Priborostroyeniye, no. 3, 1962, 21 - 22

TEXT: The author considers an arrangement for automatically controlling the correctness of assembly of signatures in books. The arrangement stops the transporter and produces a signal whenever a wrong type of signature occurs on the transporter. Each type of signature in production is represented by a discrete quantity, the total number of discrete quantities is $N = 30 \times 30 = 900$. The binary code is used for recognition. The required number of code elements is $n \approx \log_2(N - 1) \approx 10$. The code elements are represented by black marks on the signatures, printed together with the text. The marks move through a light beam of a photo-pick-up, placed on top of the bent signature spines. The resulting current pulses are amplified and applied to a coincidence circuit, to which pulses from a reference Card 1/2

An installation for automatic ...

S/119/62/000/003/007/009
D201/D303

code are also applied. When the pulses do not coincide an anti-coincidence circuit produces a pulse stopping the conveyor. Since the reference code sequence is unchanging, a simple step-by-step switch is used for reference code forming. The switch is used for reference code forming. The switch operates a bank of relays. The switch contacts are operated by the movement of the conveyor shaft so that synchronization is obtained between the photo-pick-up and reference pulses. The arrangement has been successfully tried out in August 1955 at the Leningradskaya tipografiya 'Pechatnyy Dvor' im. Gor'kogo (The Leningrad Printing House 'Pechatnyy Dvor' im. Gor'kiy). The author states that other applications are possible. There are 4 figures.

Card 2/2

KANTOR, Ye.L.

Unit for automatic control with discrete values. Priboroastroenie
no.3:21-22 Mr '62. (MIRA 15:4)
(Electronic control)

KANTOR, Ye.L.

Automatic control of precision-regulation potentiometers.
Izm.tekh. no.12:36-40 D '62. (MIRA 15:12)
(Potentiometer)

SHOSTAKOVICH, B.V., kand.tekhn.nauk; YAROVSKIY, A.Ye., inzh.;
KANTOR, Z.I., inzh.; GOLIKOV, V.S., inzh.

Certain results of the modernization of the VK-50-1IMZ turbine.
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